

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14501284  
Catalog # : 04036OT3P286TS-W40

Frame	: 284/6TS	Locked rotor time	: 14s (cold) 8s (hot)
Output	: 40 HP (30 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200 V	Altitude	: 1000 m.a.s.l.
Rated current	: 108 A	Protection degree	: IP23
L. R. Amperes	: 700 A	Cooling method	: IC01 - ODP
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 34.3 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3540 rpm	Noise level <sup>2</sup>	: 73.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 59.3 ft.lb	Approx. weight <sup>3</sup>	: 393 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 2.02 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	91.5	91.7	92.4	92.4	Max. traction
Power Factor	0.51	0.76	0.84	0.87	Max. compression

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 Z C3	6211 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 g
Lubricant type	:	Mobil Polyrex EM	

### Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

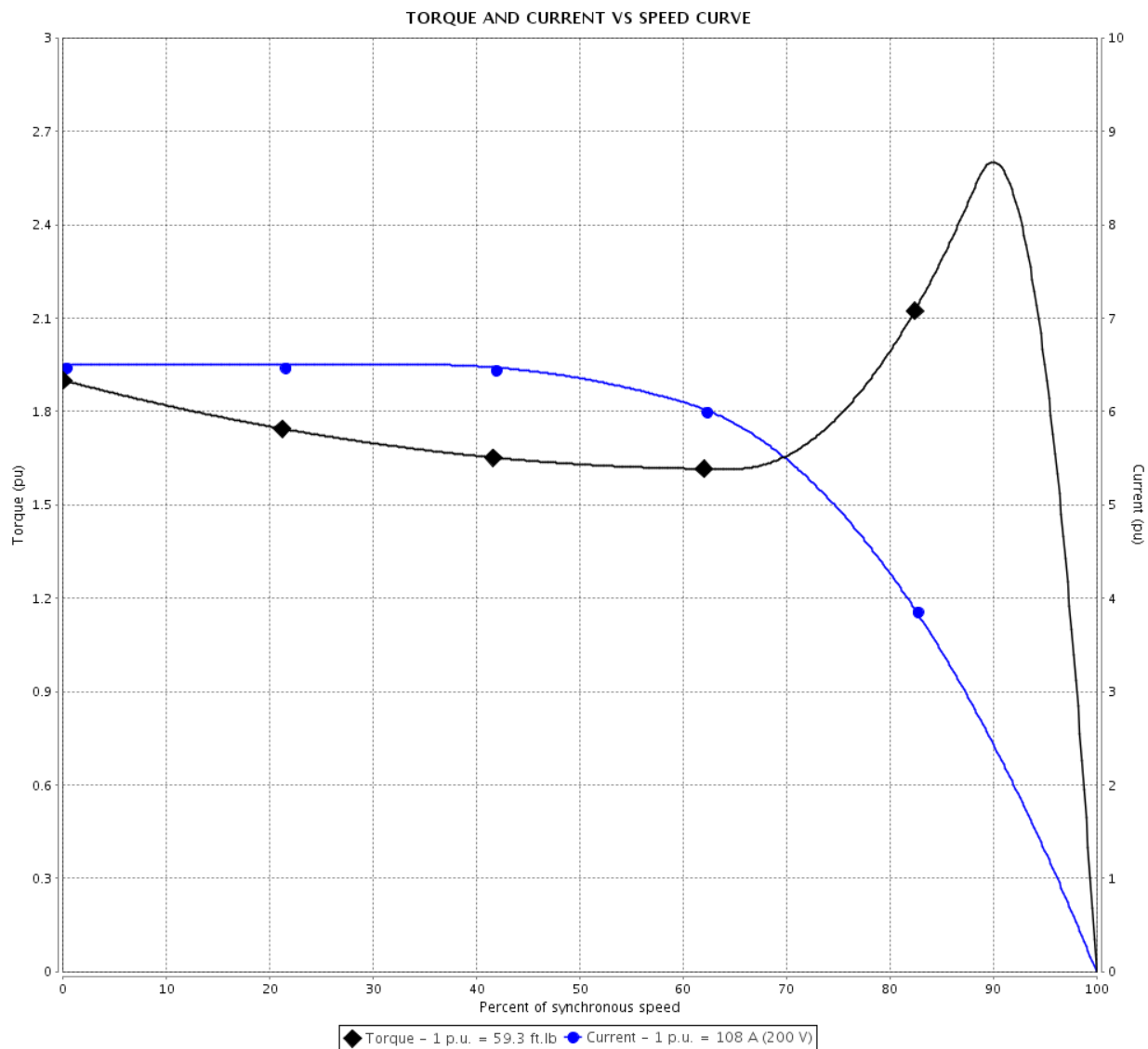


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14501284

Catalog # : 04036OT3P286TS-W40



Performance : 200 V 60 Hz 2P

Rated current	: 108 A	Moment of inertia (J)	: 2.02 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 3540 rpm	Design	: B

Locked rotor time : 14s (cold) 8s (hot)

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Date	11/04/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

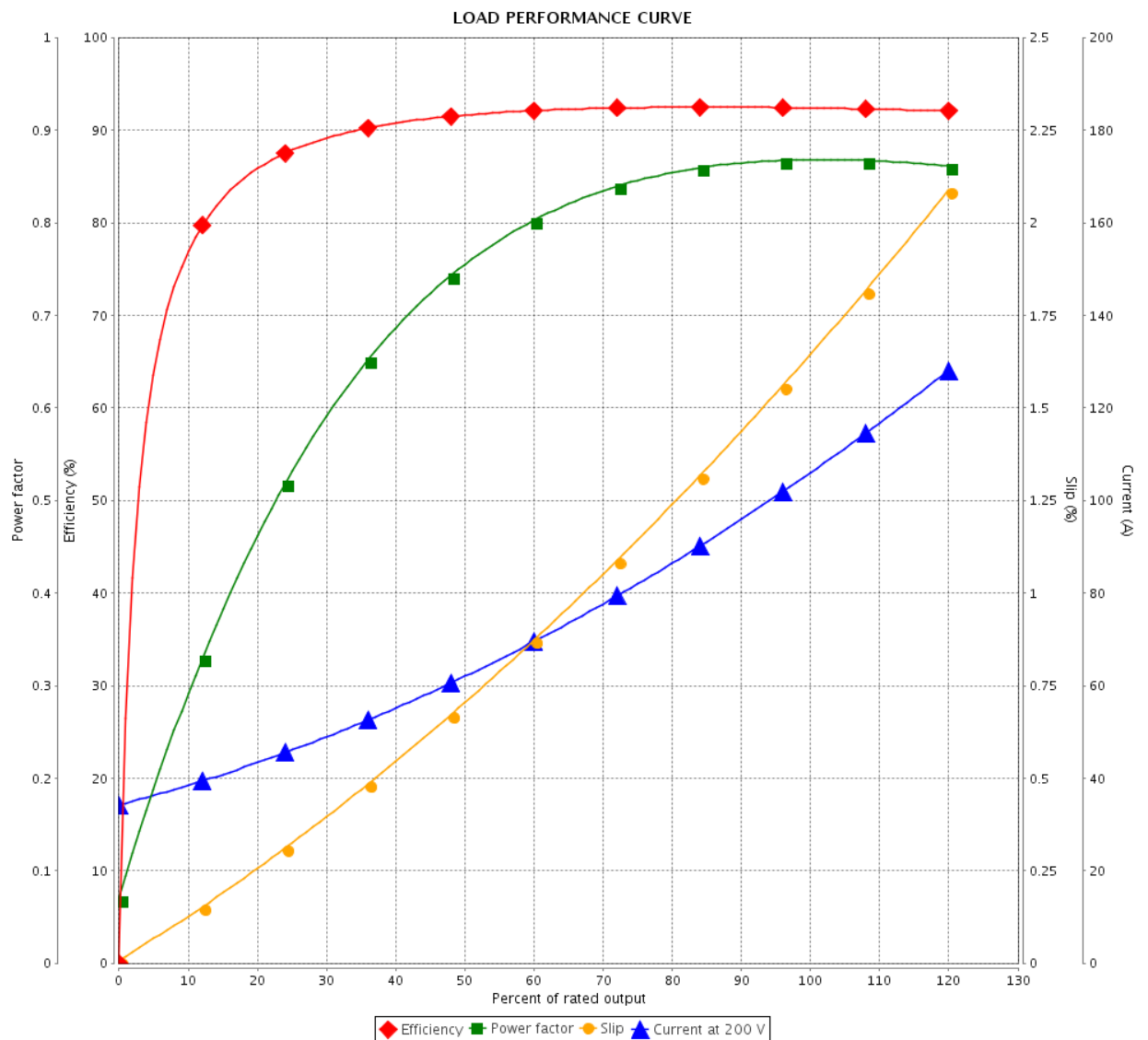


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14501284

Catalog # : 04036OT3P286TS-W40



Performance : 200 V 60 Hz 2P

Rated current : 108 A  
 LRC : 6.5  
 Rated torque : 59.3 ft.lb  
 Locked rotor torque : 190 %  
 Breakdown torque : 260 %  
 Rated speed : 3540 rpm

Moment of inertia (J) : 2.02 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer

:

Product line

: W40 NEMA Premium Efficiency  
Three-Phase

Product code :

14501284

Catalog # :

04036OT3P286TS-W40

Performance : 200 V 60 Hz 2P

Rated current

: 108 A

LRC

: 6.5

Rated torque

: 59.3 ft.lb

Locked rotor torque

: 190 %

Breakdown torque

: 260 %

Rated speed

: 3540 rpm

Moment of inertia (J)

: 2.02 sq.ft.lb

Duty cycle

: Cont.(S1)

Insulation class

: F

Service factor

: 1.25

Temperature rise

: 80 K

Design

: B

Heating constant

Cooling constant

Rev.

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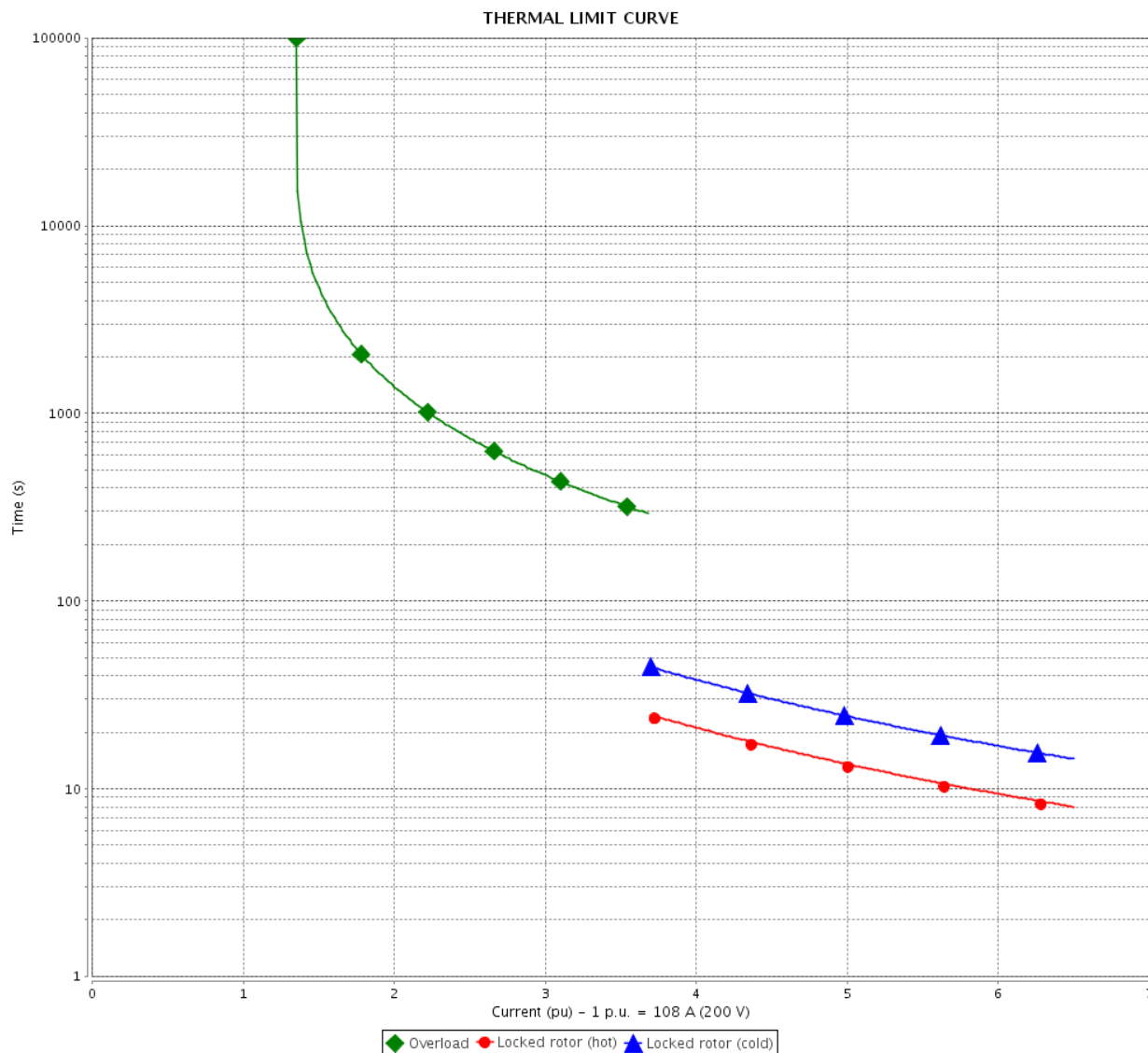
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

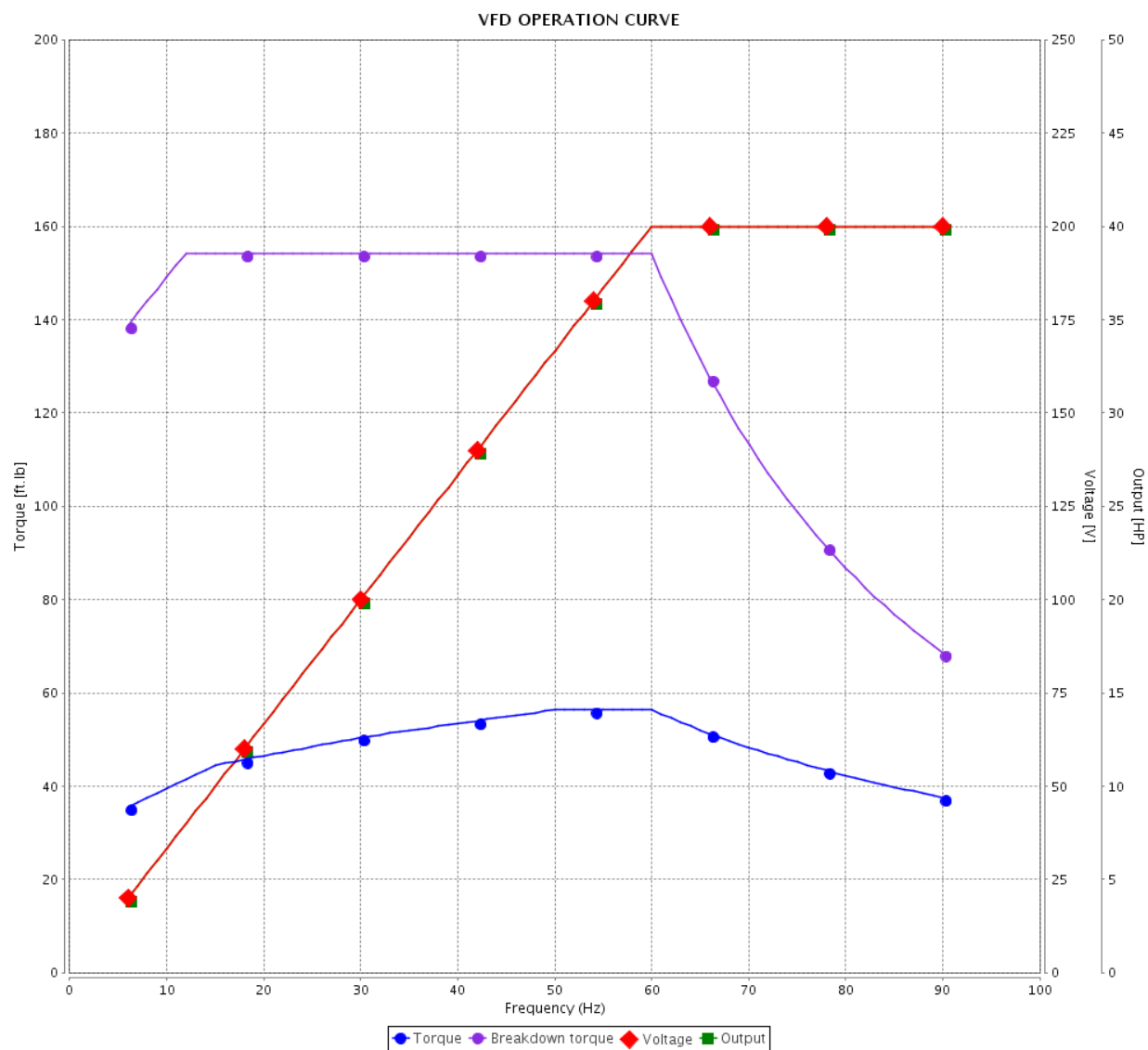


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14501284

Catalog # : 04036OT3P286TS-W40



Performance : 200 V 60 Hz 2P

Rated current : 108 A  
LRC : 6.5  
Rated torque : 59.3 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 260 %  
Rated speed : 3540 rpm

Moment of inertia (J) : 2.02 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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